

Overview

The PTE-300 PosiTrack Camera Controller (**FG630-65**) represents the camera control head in the AMX PosiTrack Pan/Tilt series. The PTE-300 controls cameras with the highest level of broadcast quality precision, using gears rather than pulleys to pan and tilt the camera, providing very smooth operation. The PTE-300 features an Ethernet control interface that offers more installation flexibility, increased distances to the master controller and no proprietary cable runs. With built-in DDDP technology, the AMX NetLinx® Controller recognizes the PTE-300 immediately, making the device easily identifiable on the network. The PTE-300 can be used in VisualArchitect (version 1.2 or higher).

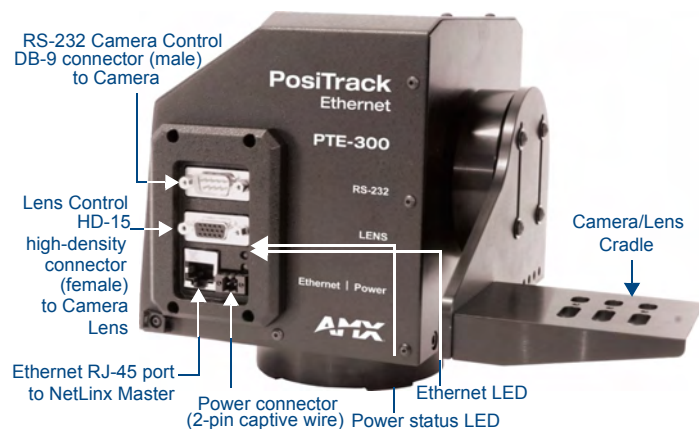


FIG. 1 PTE-300 Camera Controller (side view)

PTE-300 Specifications	
Power Requirements:	<ul style="list-style-type: none"> Max. amperage - 2.5A Quiescent current draw: 100mA @ 24V Voltage - 24V DC (18V min., 28V max.)
Weight Capacity:	30 lbs. (13.6 kg) balanced lens/camera weight (max)
Angular Travel:	<ul style="list-style-type: none"> Pan $\pm 177^\circ$ (354° total) Tilt $\pm 90^\circ$ (180° total)
Performance (24V):	35°/sec. (Pan and Tilt)
Repeatability:	± 3 arc minutes
Presets:	Stores up to 100 presets for pan, tilt, zoom, focus, and iris operations.
Optical Centerline:	<ul style="list-style-type: none"> Optical centerline is between 1/2" and 5" above the mounting plane of the camera/lens. Optical centerline allows the mounting of the camera/lens such that the tilt axis is capable of going through the optical axis of the camera.
Control Panel:	<ul style="list-style-type: none"> RS-232 DB-9 connector (for camera control) HD-15 high density connector (for lens control) RJ-45 Ethernet port provides 10BaseT communication with the NetLinx Master 2-pin 3.5mm captive-screw connector for 24VDC power
Enclosure:	Metal with enamel and anodized matte finish
Dimensions:	<ul style="list-style-type: none"> Height - 6 7/16" (16.35cm) Depth - 6 1/4" (15.49cm)
Weight:	11 lbs. (4.99 kg)
Certifications:	<ul style="list-style-type: none"> FCC Part 15 Class B CE IEC-60950
Operating Temp Range:	32° F to 120° F (0° C to 48.8° C) ambient temperature
Included Accessories:	Power Supply, 24VDC

PTE-300 Specifications (Cont.)

Other AMX Equipment:	<ul style="list-style-type: none"> CC-CAM lens control cable (FG10-159) CC-CAM RS-232 camera control cable (DB-9) Pedestal mount (PM-CAM, PosiTrack Pedestal Mount, FG630-42) Tripod mount (TM-CAM, PosiTrack Tripod Mount Adapter, FG630-43) Wall-mount bracket (WM-CAM, PosiTrack Wall Mount, FG630-41)
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Lens Compatibility

The PTE-300 supports a wide variety of lenses, including the following models:

Fujinon Lenses: <ul style="list-style-type: none"> T14x5.5DA-D58 S14x7.3BWMD-D18 S20x6.4BMD-D18 S16x6.7BMD-D4M S17x6.7BMD-D4M 	Canon Lenses: <ul style="list-style-type: none"> T10x6.5SSB/SC YH14x7.3KTSA YH14x7.3KTSA YH18x6.7KTSA
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Configuration Settings

The PTE-300 uses a lens control "joystick," accessible through the main access hole in the back of the device, which allows the installer to control pan, tilt, zoom, and focus locally. This way, when an installer is connecting wiring in an inaccessible or possibly hazardous location, such as atop a ladder, the installer does not need to leave the site and go to the control room to see if the connections are correct.

The lens control joystick contains 5 switches. Moving it left and right relative to the top of the device controls pan; moving it up and down controls tilt. Pressing in the center of the switch puts the joystick in lens control mode, where moving the joystick left and right adjusts zoom, and moving the joystick up and down adjusts focus. Pressing in the center switch again puts it back into pan/tilt control mode; if the camera has not been enabled, this may be used to lock out further commands from the joystick if necessary. When the PTE-300 is being controlled locally via the joystick, communications from the NetLinx master are ignored. The LED to the right of the joystick flashes once per second in network control mode and twice per second in local mode.

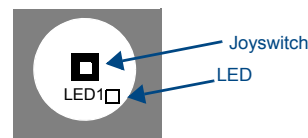


FIG. 2 PTE-300 Joystick location (back panel)

Using the RS-232 Camera Control DB-9 connector

The PTE-300 contains one EIA RS-232C standard port for equipment that requires RS-232 control. The RS-232 DB-9 (male) connector on the PTE-300 unit connects to the camera head's RS-232 connector. The following table describes the pinouts.

(DB-9) RS-232 Connector Pinouts	
Pin	Signal
1	N/A
2	RXD
3	TXD
4	N/A
5	GND
6	N/A
7	RTS
8	CTS
9	N/A

The following communication parameters are supported:

- 300, 2400, 9600, 19200 and 38400 baud
- 7, 8, or 9 Data bits
- 1 or 2 Stop bits
- Even, Odd and None parity settings

The default RS-232 communications settings are:

- 9600 baud
- No Parity
- 8 bits
- 1 stop bit

Using the lens control HD-15 (high density) connector

The PTE-300 is designed to control servomotor camera lenses. FIG. 3 shows the HD-15 HD connector pin numbers for each connector function.

Lens Control HD-15 Connector Pinouts for Servomotor Mode			
Pin	PTE-300 HD-15 connector functions	Direction	Lens function
1	Not used	N/A	None
2	GND	Output	None (ground for power supply)
3	Zoom-drive	Output	Zoom
4	Focus-drive	Output	Focus
5	Iris-drive	Output	Iris
6	Zoom-speed/position	Output	Zoom-positional/speed mode
7	Focus-speed/position	Output	Focus-positional/speed mode
8	Iris-local/auto	Output	Iris-local/auto select
9	Iris-speed/position	Output	Iris-positional/speed mode
10	VREF-A (+7.5V)	Input	VREF-A (+7.5 V). The reference voltage must be present when the PTE-300 powers up to operate correctly in servomotor mode.
11	VREF-B (+2.5 V)	Input	VREF-B (+2.5 V). The reference voltage must be present when the PTE-300 powers up to operate correctly in servomotor mode.
12-15	Not used	N/A	None

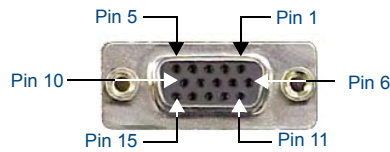


FIG. 3 Lens control HD-15 connector (female) wiring pinouts

Ethernet/RJ-45 Port

The following table lists the pinouts, signals, and pairing for the Ethernet connector.

Ethernet RJ-45 Pinouts and Signals				
Pin	Signals	Connections	Pairing	Color
1	TX +	1 ----- 1	1 ----- 2	Orange-White
2	TX -	2 ----- 2		Orange
3	RX +	3 ----- 3	3 ----- 6	Green-White
4	no connection	4 ----- 4		Blue
5	no connection	5 ----- 5		Blue-White
6	RX -	6 ----- 6		Green
7	no connection	7 ----- 7		Brown-White
8	no connection	8 ----- 8		Brown

Power Connector

The PTE-300 receives all power from the 24VDC and GND connections on the 2-pin power connector. Use the included 24 VDC power supply to power the PTE-300.

Mounting the PTE-300

Mount the PTE-300 to a flat horizontal surface, either upright or inverted.

- Each PTE-300 unit can be mounted to camera mounts such as the TM-CAM, WM-CAM, and PM-CAM.
- The camera/lens cradle can be mounted on either side of the cradle support bracket.

Note: Refer to the PTE-300 Instruction Manual for detailed mounting instructions.

COMM Module Implementation

The AMX_PTE300_COMM module, available from www.amx.com, translates between the standard interface and the camera IP protocol. It parses the buffer for responses from the camera, sends strings to control the camera, and receives commands either from a UI module or from Telnet sessions. A User Interface (UI) module is also provided. This module uses the standard interface described below and parses the command responses for feedback.

Note: Refer to the PTE-300 Instruction Manual for detailed instructions on interfacing with the PTE-300 module.

Upgrading PTE-300 Firmware

The PTE-300 features upgradable firmware, with updates available via the AMX website. Firmware upgrades are accomplished via a Windows HyperTerminal session.

Note: If you are using Windows 95/ 98 /98 SE, Windows 2000, Windows ME, Windows NT4, or Windows XP, the Windows HyperTerminal program is included as part of the operating system.

Before You Begin

- Download the latest PTE-300 firmware file (SW630_65_A_PTE300_VX_XX.KMT) from www.amx.com.
- Verify that nothing is connected to Port 23 on your PC. This is the port used by HyperTerminal to transfer files.
- You will need the IP address for the PTE-300 in order to transfer the firmware file to the PTE-300.
- When using HyperTerminal, the PTE-300 must reside on the same LAN as your PC in order to access it.

Note: The factory default Static IP Address for each PTE-300 is 192.168.1.160, but this may be changed via the Web Configuration Interface.

Upgrading the PTE-300 Firmware Via HyperTerminal

- In Windows, launch the HyperTerminal program (select **Start > Programs > Accessories > Communications > HyperTerminal**).
- Enter a name for the session in the name field (example: PTE-300).
- Click **OK** to proceed to the **Connect To** dialog.
- In the **Connect using** drop-down menu, select **TCP/IP (WinSock)**.
- In the **Host address** field, enter the IP Address of the target PTE-300.
- Once the connection has been established, the HyperTerminal window is opened. Note that the Name for this session is indicated in the title bar of the window.
- Select **Transfer > Send File** to access the **Send File** dialog.
- Click the **Browse** button to open the **Select File To Send** dialog. Locate and select the firmware file that you want to load on the PTE-300 (SW630_65_A_PTE300_VX_XX.KMT).
- In the **Protocol** drop-down menu, select **Kermit**.
- Click **Send** to initiate the transfer.

Assuming the transfer is successful:

- The program will display the message "Kermit File Sent To PTE300" once the transfer is complete.
- The PTE-300 will automatically reboot itself to initiate the new firmware.

If the transfer is not successful:

- The status LED on the PTE-300 will blink.
- In this case, check all connections and settings, and repeat the process.

Web Configuration Interface

The Web Configuration Interface allows you to configure and upgrade the Internet connection settings of the PTE-300. To access the Web Configuration Interface, enter the PTE-300's IP address in your internet browser. The default login user name is "Admin" and the default password is "1988".

Note: The factory default Static IP Address for each PTE-300 is 192.168.1.160, but this may be changed at any time.

Change Username and Password

You can enable or disable username and password protection for the Web Configuration Interface. If you disable username/password security, anyone can access the interface's web setup pages. With security enabled, all of the interface's web setup pages will be protected with a username and password, although you will only need to enter this information once when you access the web page.

To change the username or password:

- From the Security page, select whether Security is Enabled or Disabled.
- Enter the New Username.
- Enter the New Password.
- Click the Change Username and Password button to save your changes.

WARNING: If you change the username or password and forget them, the default username and password cannot be restored. If this happens, it would be necessary to return the PTE-300 to the factory.

